

CLAIMS

What is claimed is:

1. A cleaning apparatus comprising:
a reservoir containing a liquid, said reservoir able to be easily manipulated
5 by a user to dispense said liquid;
a device for increasing the level of oxidative properties in said liquid;
a circulation flow path communicating with said reservoir and said device
to allow at least some of said liquid in said reservoir to flow from said reservoir to said
device and back to said reservoir.
- 10 2. An apparatus as defined in claim 1, wherein:
said liquid is water; and
said device is an ozone cell for dispensing ozone into said water flowing
to said device.
- 15 3. An apparatus as defined in claim 1, wherein:
said reservoir is a spray bottle.
4. An apparatus as defined in claim 1, wherein:
said reservoir is a carafe.
5. An apparatus as defined in claim 1, wherein:
said device is positioned in a base unit; and
20 said reservoir is selectively connectable to said base unit and said
circulation flow path.
- 25 6. An apparatus as defined in claim 1, wherein:
said circulation flow path includes a recirculation flow path and a
treatment flow path, where said treatment flow path directs water from said recirculation
flow path to said device and back to said recirculation flow path.
- 30 7. An apparatus as defined in claim 6, wherein said treatment flow path includes
a pre-treatment region upstream of said device and downstream of said diversion of said
treatment flow path from said recirculation flow path.
8. An apparatus as defined in claim 7, wherein said treatment region is a
deionization resin bed.

9. An apparatus as defined in claim 6, wherein said treatment flow path includes a post-treatment region downstream of said device and upstream of the reconvergence of said treatment flow path and said recirculation flow path.

10. An apparatus as defined in claim 9, wherein said post-treatment region is a
5 *lead abatement filter.*

11. A residential cleaning apparatus comprising:
a base unit including an ozone generator;
a reservoir for holding water and for use by a user to selectively dispense water, said reservoir being selectively and fluidically attachable to said base unit;

10 a circulation flow path formed between said reservoir and said base unit, and fluidically and at least in part connecting said reservoir with said ozone generator; and

15 wherein said at least some of said water flows in said circulation flow path between said reservoir and said ozone generator and back to said reservoir, said ozone generator dispensing ozone into said water.

12. An apparatus as defined in claim 11, wherein:
said circulation flow path includes a recirculation flow path and a treatment flow path, said recirculation flow path extending between said reservoir, said base, and back to said reservoir, and said treatment flow path extending from said 20 recirculation flow path to said ozone generator and back to said recirculation flow path; and

wherein said ozone generator dispenses ozone into said water in said treatment flow path.

13. An apparatus as defined in claim 9, wherein:

said treatment flow path includes a deionization filter media positioned upstream of said ozone generator.

14. An apparatus as defined in claim 13, wherein said deionization filter media is positioned in said base unit.

15. An apparatus as defined in claim 13, further comprising:

a cartridge selectively and fluidically connectable to said base unit, and forming part of said treatment flow path; and

wherein said deionization filter media is positioned in said cartridge.

~~12~~ 16. An apparatus as defined in claim ~~12~~, further comprising:

5 a mixing device connected between said treatment flow path and said recirculation flow path, said mixing device to help mix the treated water in the treatment flow path with the untreated water in the recirculation flow path.

~~13~~ ¹³ 17. An apparatus as defined in claim ~~16~~, wherein:

¹⁴ 19. said mixing device is a venturi.

10 ~~18~~ 18. An apparatus as defined in claim ~~12~~, wherein:

a pump is positioned in said circulation flow path to assist in moving said water along said circulation flow path.

~~15~~ ¹⁵ 19. An apparatus as defined in claim ~~14~~, wherein:

¹⁶ 16. said base unit is positionable on a support surface.

15 ~~20~~ 20. An apparatus as defined in claim ~~14~~, wherein:

¹⁷ 17. said base unit is built into a household appliance.

¹⁸ 21. An apparatus as defined in claim ~~14~~, wherein:

said reservoir is a spray bottle.

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